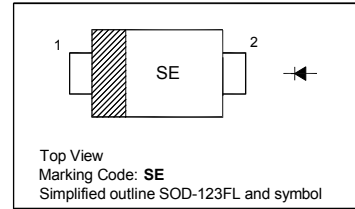


MBR0530W

Surface Mount Schottky Barrier Diode

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	30	V
Non-Repetitive Peak Reverse Voltage	V_{RSM}	30	V
Maximum DC Blocking Voltage	V_R	30	V
Average Forward Rectified Current	$I_{F(AV)}$	0.5	A
Peak Forward Surge Current (8.3 ms Single Half Sine-wave)	I_{FSM}	20	A
Thermal Resistance Junction to Lead	$R_{\theta JL}$	150	$^\circ\text{C/W}$
Thermal Resistance Junction to Ambient ¹⁾	$R_{\theta JA}$	206	$^\circ\text{C/W}$
Operating Junction Temperature	T_j	- 65 to + 125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 65 to + 125	$^\circ\text{C}$

¹⁾ 1 inch square pad size (1 X 0.5 inch for each lead) on FR4 board

Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Max.	Unit
Forward Voltage at $I_F = 100 \text{ mA}$ at $I_F = 500 \text{ mA}$	V_F	0.375 0.43	V
Reverse Current at $V_R = 30 \text{ V}$ at $V_R = 15 \text{ V}$	I_R	130 20	μA

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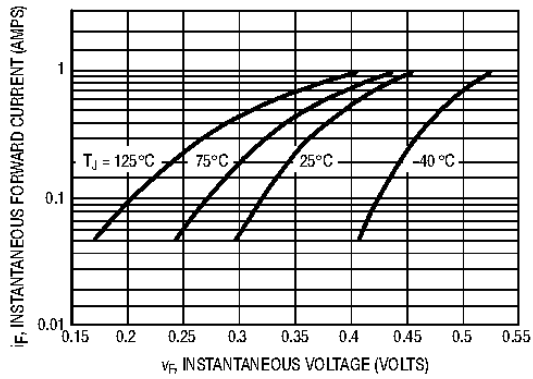


Figure 1. Typical Forward Voltage

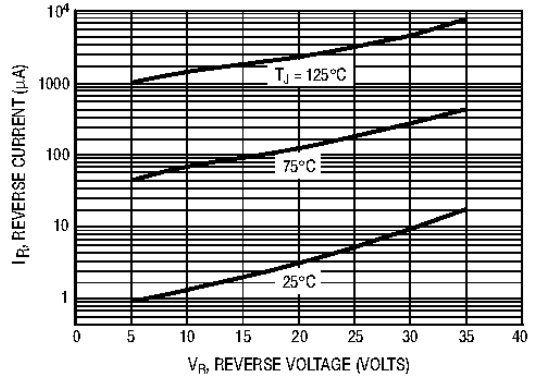


Figure 2. Typical Reverse Current

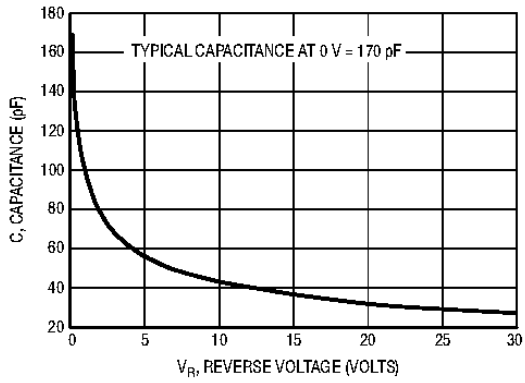


Figure 3. Typical Capacitance

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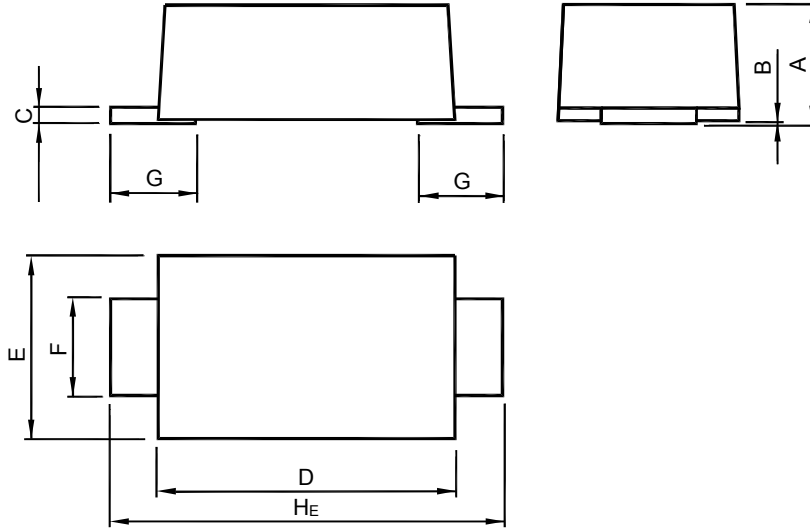
ISO14001 : 2004 Certificate No. 121505007 ISO 9001 : 2008 Certificate No. 01141012 OHSAS 18001 : 2007 Certificate No. 05191508008 IECQ QC 080000 Certificate No. E241800074482

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PACKAGE OUTLINE

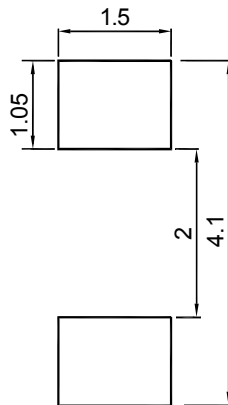
Plastic surface mounted package; 2 leads

SOD-123FL



UNIT	A	B	C	D	E	F	G	H _E
mm	1.08	0.1	0.2	2.9	1.9	1.1	0.9	3.9
	0.88	0	0.1	2.6	1.7	0.8	0.7	3.5

Recommended Soldering Footprint



Packing information

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	inch	mm	inch	
SOD-123FL	8	4 ± 0.1	0.157 ± 0.004	178	7	3,000

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